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# Sound generation by a filtrational flow in porous media

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## Abstract

Results of laboratory and oilfield experiments carried out for the investigation of hydrodynamic sound generation arising in the process of filtration are cited. It is shown that the reservoir structure determines the spectrum of acoustic radiation. Alterations of the filtration velocity and the kind of fluid lead to changing of the radiation intensity without considerably variation of the spectrum form. The results of the laboratory experiments and of those conducted in the oilfields are show to be identical. The conclusion is made that the experimental results confirm the existence of interconnection between the collector structure and frequencies in the acoustic spectrum. It is noted that the kind of fluid does not effect the main frequency hydroelastic acoustic radiation in a capillar-porous medium.